

Courses offered in Spring 2024-25

<u>Code</u>	<u>Title</u>	<u>Remarks</u>
BIEN1010	Introduction to Biomedical Engineering	
BIEN2410	Cellular and Systems Physiology for Engineers	
BIEN3320	Data Science for Biology and Medicine	
CENG1500	A First Course on Materials Science and Applications	
CENG2210	Chemical and Biological Engineering Thermodynamics	
CENG2220	Transport Phenomena I	
CENG3110	Process Dynamics and Control	
CENG3150	Integrated Chemical Process and Product Design	
CENG3950	Chemical and Environmental Engineering Laboratory	<i>Not for pre-enrollment</i>
CENG4720	Environmental Impact Assessment and Management Systems	
CIVL1100	Discovering Civil and Environmental Engineering	
CIVL1160	Civil Engineering and Modern Society	
CIVL2120	Mechanics of Materials	
CIVL2170	Infrastructure Systems Engineering and Management	
CIVL2410	Environmental Assessment and Management	
CIVL2510	Fluid Mechanics	
CIVL3210	Introduction to Construction Management	
CIVL3320	Reinforced Concrete Design	
CIVL3420	Water and Wastewater Engineering	
CIVL3610	Traffic and Transportation Engineering	
CIVL3740	Geotechnical Analysis and Design	
CIVL4100R	Practical Machine Learning for Smart Infrastructure Systems	
CIVL4100T	Applications of Artificial Intelligence in Remote Sensing	
CIVL4220	Scientific Machine Learning for Infrastructure Systems	
CIVL4240	Smart Infrastructure Sensing and Data Analytics	
CIVL4270	Construction Law and Contract Administration	
CIVL4340	Prestressed Concrete Design	
CIVL4430	Environmental Impact Assessment	
CIVL4370	Computer Methods of Structural Analysis	
CIVL4450	Carbon Footprint Analysis and Reduction	
CIVL4480	Climate Modeling and Risk Assessment	
CIVL4640	Introduction to Smart City Economics	
CIVL4710	Soil Slope Engineering	
CIVL4810	Construction Materials Technology	
COMP1001	Exploring Multimedia and Internet Computing	
COMP1021	Introduction to Computer Science	
COMP1029C	C Programming Bridging Course	
COMP1029J	Java Programming Bridging Course	
COMP1029P	Python Programming Bridging Course	
COMP1029V	Excel VBA Programming Bridging Course	
COMP1942	Exploring and Visualizing Data	
COMP1944	Artificial Intelligence Ethics [blended]	<i>Not for pre-enrollment</i>
COMP2011	Programming with C++	
COMP2012	Object-Oriented Programming and Data Structures	
COMP2211	Exploring Artificial Intelligence	<i>Not for pre-enrollment</i>
COMP2611	Computer Organization	
COMP2711	Discrete Mathematical Tools for Computer Science	
COMP3021	Java Programming	<i>Not for pre-enrollment</i>
COMP3071	Honors Competitive Programming	<i>Not for pre-enrollment</i>
COMP3111	Software Engineering	
COMP3211	Fundamentals of Artificial Intelligence	<i>Not for pre-enrollment</i>
COMP3511	Operating Systems	
COMP3633	Competitive Programming in Cybersecurity II	<i>Not for pre-enrollment</i>
COMP3711	Design and Analysis of Algorithms	
COMP4021	Internet Computing	<i>Not for pre-enrollment</i>
COMP4121	Modern Compiler Construction	<i>Not for pre-enrollment</i>
COMP4211	Machine Learning	<i>Not for pre-enrollment</i>
COMP4321	Search Engines for Web and Enterprise Data [pure online]	<i>Not for pre-enrollment</i>
COMP4331	Introduction to Data Mining	<i>Not for pre-enrollment</i>
COMP4332/RMBI4310	Big Data Mining and Management	<i>Not for pre-enrollment</i>

COMP4421	Image Processing	<i>Not for pre-enrollment</i>
COMP4431	Multimedia Computing [blended]	<i>Not for pre-enrollment</i>
COMP4441	Computer Music	<i>Not for pre-enrollment</i>
COMP4461	Human-Computer Interaction	<i>Not for pre-enrollment</i>
COMP4471	Deep Learning in Computer Vision	<i>Not for pre-enrollment</i>
COMP4521	Mobile Application Development	<i>Not for pre-enrollment</i>
COMP4541	Blockchain, Cryptocurrencies and Smart Contracts	<i>Not for pre-enrollment</i>
COMP4611	Design and Analysis of Computer Architectures	<i>Not for pre-enrollment</i>
COMP4621	Computer Communication Networks I	<i>Not for pre-enrollment</i>
COMP4632	Cybersecurity: Attacks and Counter-measures	<i>Not for pre-enrollment</i>
COMP4634	Cybersecurity (previous course code: COMP3632)	<i>Not for pre-enrollment</i>
COMP4651	Cloud Computing and Big Data Systems	<i>Not for pre-enrollment</i>
COMP4911/6613D-PGcrosslist	IT Entrepreneurship/Start Me Up: Creating Value by Innovation	<i>Not for pre-enrollment</i>

ELEC1010	Electronic and Information Technology	
ELEC1100	Introduction to Electro-Robot Design	
ELEC1200	A System View of Communications: from Signals to Packets	
ELEC2100	Signals and Systems	
ELEC2350	Introduction to Computer Organization and Design	
ELEC2400	Electronic Circuits	
ELEC2600	Probability and Random Processes in Engineering	
ELEC3100	Signal Processing and Communications	
ELEC3120	Computer Communication Networks	
ELEC3180	Data-Driven Portfolio Optimization	
ELEC3200	System Modeling, Analysis and Control	
ELEC3300	Introduction to Embedded Systems	
ELEC3400	Introduction to Integrated Circuits and Systems	
ELEC3600	Electromagnetics: From Wireless to Photonic Applications	
ELEC4130	Machine Learning on Images	
ELEC4260	Introduction to Mobile Robotics (previous course code: ELEC 3210)	
ELEC4310	Embedded System Design	
ELEC4430	Integrated Power Electronics	
ELEC4520	Integrated Circuit Fabrication Technology	
ELEC4530	Fundamentals of Photovoltaic and Renewable Energy	
ELEC4840	Artificial Intelligence for Medical Image Analysis	<i>previous code: ELEC4010N</i>
ELEC4610	Engineering Optics	

ENEG3910	Sustainable Energy Laboratory	<i>Not for pre-enrollment</i>
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IEDA courses from last spring for reference only, tentative plan is not available:

IEDA2010	Introduction of Industrial Engineering and Decision Analytics	
IEDA2100	Computing in Industrial Applications (IEDA2100S)	
IEDA2540	Statistics for Engineers	
IEDA3180	Data Driven Portfolio Optimization	
IEDA3460	Demand and Supply Analytics	
IEDA3560	Predictive Analytics	
IEDA4100	Integrated Production Systems	
IEDA4130	System Simulation	
IEDA4200	Design of Logistics and Manufacturing Systems	
IEDA4331	Quantitative Methods in Financial Engineering	
IEDA4500	Engineering Foundations of Fintech	

ISDN courses from last spring for reference only, tentative plan is not available:

ISDN1001	Introduction to Integrative Systems and Design	
ISDN1006	Human-centered Innovation	
ISDN2000	What is Design and Why Design?	
ISDN2400	Physical Prototyping	
ISDN2602	Internet of Things: Integrative System Design	
ISDN3004	Advanced Sketching	
ISDN4000P	Introduction to Brand Design	
ISDN4000S	Applied Generative AI for Interdisciplinary Projects	
ISDN4000U	Design with 3D Visual Communication Technologies	

MECH1905	Buildings for Contemporary Living	
MECH1906	Mechanical Engineering for Modern Life	
MECH2210	Fluid Mechanics	

MECH2410	Engineering Materials I	
MECH3510	CAD/CAM	
MECH3620	Aircraft Design	
MECH3630	Electrical Technology	
MECH3660	Gas Turbines & Jet Propulsion	
MECH3680	Avionics Systems	
MECH4340	Air Conditioning Systems	
MECH4350	Indoor Air Quality in Buildings	
MECH4710	Introduction to Robotics	
MECH4830	Introduction to Aerospace CFD	

Last updated: 26 Apr 2024